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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,438	06/25/2003	Robert M. Batz	062891.1125	6343
5073 7590 05/30/2008 BAKER BOTTS L.L.P. 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980				
EXAMINER COULTER, KENNETH R				
ART UNIT 2141		PAPER NUMBER		
NOTIFICATION DATE 05/30/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/606,438

**Applicant(s)**

BATZ ET AL.

**Examiner**

Kenneth R. Coulter

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 18 – 22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claim 18 is directed to software that is not executed on a **hardware** processor.

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brendel et al. (U.S. Pat. No. 5,774,660) (World-Wide-Web Server With Delayed Resource-Binding for Resource-Based Load Balancing on a Distributed Resource Multi-Node Network) in view of Nguyen (U.S. Pat. Pub. No. 2003/0172145) (System and Method for Designing Developing and Implementing Internet Service Provider Architectures).

2.1 Regarding claim 1, Brendel discloses an apparatus, comprising:

a load balancer operable to receive a packet included within a request that is associated with an end user, the load balancer being operable to communicate the packet to a selected one of a plurality of gateways, the load balancer being operable to

build an object that correlates an internet protocol (IP) address associated with the end user to the selected gateway such that the object may be used to direct subsequently received packets associated with the end user to the selected gateway, the subsequently received packets being directed by the load balancer based on the end user IP address information included in the subsequently received packets (Figs. 17, 19; col. 7, lines 14 – 29; col. 16, lines 21 – 33 “The destination IP address is set to the destination servers real IP address by the load balancer so that the destination’s NIC address is generated by step 332 and prefixed to the packet.”).

However, Brendel does not explicitly disclose that the loadbalancer tracks only the IP address at a layer three level such that the subsequently received packets are loadbalanced only on a binding between the IP address and the selected gateway.

Nguyen teaches loadbalancing only at a layer three level (paragraph 497 “Layers within an ISP architecture may include one or more of, but are not limited to, **a network layer**, a system layer, ...”).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement load balancing in Brendel at the network layer only since Nguyen teaches that layers within an ISP architecture may include only a network layer; and “DNS server 14 is often a special server at an Internet Service Provider” (col. Lines 24 – 28 of Brendel)

2.2 Per claim 2, Brendel teaches the apparatus of claim 1, wherein an **additional** load balancer may receive the packet and build an additional object that correlates the

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IP address associated with the end user to the selected gateway such that the additional object may be used to direct subsequently received additional packets associated with the end user to the selected gateway, the subsequently received additional packets being directed by the additional load balancer based on destination information included in the subsequently received additional packets (col. 19, lines 9 – 14).

2.3 Regarding claim 3, Brendel discloses the apparatus of claim 2, wherein the load balancers evaluate communication flows in one direction in order to direct the flows to the selected gateway based on a selected one of source and destination information (Figs. 12, 17, 19; col. 7, lines 14 – 29; col. 13, lines 18 – 32 "several routers, hubs, or switches"; col. 16, lines 21 – 33).

2.4 Per claim 4, Brendel teaches the apparatus of claim 1, wherein the gateway is a selected one of a group of elements consisting of:

- a firewall;

- a switch;

- an intrusion detection element;

- gateway general packet radio service (GPRS) support node (GGSN);

- a client service packet gateway (CSPG);

- a packet data serving node (PDSN); and

a Layer-two tunneling protocol network server (LNS) (col. 13, lines 18 – 32 “several routers, hubs, or switches”).

2.5 Regarding claim 5, Brendel discloses the apparatus of claim 1, wherein the load balancer includes a table operable to store the object that correlates the IP address of the end user to the selected gateway (Fig. 11A; col. 12, lines 7 – 24 “session table”).

2.6 Per claim 6, Brendel teaches the apparatus of claim 1, wherein the gateway performs per-host operations based on an identity associated with the end user (Figs. 12, 17, 19; col. 7, lines 14 – 29; col. 13, lines 18 – 32; col. 16, lines 21 – 33).

2.7 Regarding claim 7, Brendel discloses the apparatus of claim 1, wherein the load balancer includes one or more algorithms that may be used in order to determine which of the plurality of gateways is to receive the packet (Figs. 12, 17, 19; col. 7, lines 14 – 29; col. 13, lines 18 – 32 “several routers, hubs, or switches”; col. 16, lines 21 – 33).

2.8 Per claims 8 – 22, the rejection of claims 1 – 7 under 35 USC 103 (paragraphs 2.1 – 2.7 above) applies fully.

***Response to Arguments***

Applicant's arguments with respect to claims 1 – 22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R. Coulter whose telephone number is 571 272-3879. The examiner can normally be reached on M - F, 7:30 am - 4 pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenneth R Coulter/  
Primary Examiner, Art Unit 2141

krc